

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alcassedan, Virginia 22313-1450 www.emplo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/517,947 | 10/06/2005 | Michael E McClurken | TLK022CON1 | 7237 |
| 32947 7550 99082010 GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC 55 SOUTH COMMERICAL STREET | | | EXAMINER | |
| | | | GOOD, SAMANTHA M | |
| MANCHESTER, NH 03101 | | ART UNIT | PAPER NUMBER | |
| | | | 3739 | • |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 09/08/2010 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/517,947 MCCLURKEN ET AL. Office Action Summary Examiner Art Unit SAMANTHA GOOD 3739 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 12 August 2010. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 68-87 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 68-87 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 14 December 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Attachment(s)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Art Unit: 3739

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPC2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPC 645 (Fed. Cir. 1985); In re Van Omum, 686 F.2d 937, 214 USPC 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPC 944 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3,73(b).

Claims 68-87 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,953,461. Although the conflicting claims are not identical, they are not patentably distinct from each other because patent 6,953,461 and the instant application all recite the same basic structure of first and second movable jaws with tissue grasping surfaces and fluid passages along with a permutation of similar elements throughout. The various combinations are all deemed to be obvious variants as no criticality is afforded to any particular combination of elements in any particular patent.

Art Unit: 3739

Claims 68-87 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the pending claims of copending Application No. 10/532,704; 10/914,650. Although the conflicting claims are not identical, they are not patentably distinct from each other because these applications and the instant application all recite the same basic structure of first and second movable jaws with tissue grasping surfaces and fluid passages with a permutation of similar elements throughout. The various combinations are all deemed to be obvious variants as no criticality is afforded to any particular combination of elements in any particular patent.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 3739

Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 68-79, 83, and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hooven (6.086.586) in view Mulier et al (6.096.037).

Referring to claim 68. Hooven teaches a tissue grasping device (Figure 2 with graspers 14) comprising: a first jaw (22) and a second jaw (24), at least one of the jaws being movable toward the other jaw (Col. 3, lines 44-54; Figure 3); the first jaw having a first jaw tissue grasping surface and the second jaw having a second jaw tissue grasping surface (shown best in Figures 3 and 5), the tissue grasping surface of each jaw directly opposing each other and comprising an electrically insulative surface (Col. 4, lines 11-26; Figures 3, 4A and 5); a first electrode (42) and a second electrode (44), the first and second electrodes configured to have opposite polarity when electrically coupled to a radio frequency power source (12 - shown in Figure 2) and positioned for an electrical current from the first and second electrodes to flow in tissue grasped between the tissue grasping surfaces substantially parallel to the tissue grasping surfaces and across a width of the tissue grasping surfaces (Col. 4, lines 11-56; Figures 3, 4A, 5 and 6); the first jaw tissue grasping surface and the second jaw tissue grasping surface medial to the first electrode (42) and the second electrode (44), and the first electrode (42) and second electrode (44) laterally outside the first jaw tissue grasping surface and the second jaw tissue grasping surface (Col. 4, lines 11-56; Figures 4A, 5 and 6).

Mulier et al teaches an analogous tissue grasping device (Figure 2) that is fluidassisted. Mulier et al teaches a fluid-assisted tissue grasping device that comprises a

Art Unit: 3739

first jaw (44/48) and a second jaw (46/50) and a first electrode (47) and second electrode (49) (Col. 4, lines 34-47 and lines 55-64). Mulier et al teaches at least one fluid delivery passage (52 and 54) and at least one fluid outlet (166) (Col. 4, line 55 through Col. 5, line 12; Col. 5, lines 25-35; Figures 3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping device, as taught by Hooven, to be fluid-assisted having a fluid delivery passage and fluid outlet, as taught by Mulier et al, in order to a maintain relatively consistent maximal electrical contact areas, substantially prevent hot spots and allow higher power than soft coagulation, and further allows for little to no arcing, cutting smoke or char (Col. 5, lines 53-56).

Referring to claim 69, the modified Hooven reference teaches wherein the at least one fluid outlet (166) further comprises a first fluid outlet and a second fluid outlet (Figures 4-5 of Mulier et al).

Referring to claim 70, the modified Hooven reference teaches at least one of the first fluid outlet and the second fluid outlet is used to provide a fluid onto the first electrode or the second electrode, respectively (Col. 4, lines 55 through Col. 5, line 7; Figures 3-5 – Mulier et al).

Referring to claim 71, Hooven fails to teach a fluid outlet partially defined by an electrode. However, Mulier et al teaches wherein at least one of the first fluid outlet and

Art Unit: 3739

second fluid outlet (166) is defined by the first or second electrode (Col. 4, line 65 through Col. 5, line 10; Figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping device, as taught by Hooven, to have a first or second fluid outlet defined by the first or second electrode, as taught by Mulier et al, in order to a maintain relatively consistent maximal electrical contact areas, substantially prevent hot spots and allow higher power than soft coagulation, and further allows for little to no arcing, cutting smoke or char (Col. 5, lines 53-56).

Referring to claim 72, Hooven teaches wherein the first jaw tissue grasping surface has a first edge opposite a second edge (shown best in Figure 5). Mulier et al teaches wherein at least one of the first fluid outlet and the second fluid outlet is used to provide a fluid between the first electrode and the first edge of the first jaw tissue grasping surface or between the second electrode and the second edge of the first jaw tissue grasping surface, respectively (Col. 4, lines 55 through Col. 5, line 10; Figures 3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping device, as taught by Hooven, to have the fluid outlet provide fluid between the electrode and edge of the grasping surface, as taught by Mulier et al, in order to a maintain relatively consistent maximal electrical contact areas, substantially prevent hot spots and allow higher power than soft coagulation, and further allows for little to no arcing, cutting smoke or char (Col. 5, lines 53-56).

Art Unit: 3739

Referring to claim 73, Hooven fails to teach a fluid outlet. Mulier et al teaches wherein the first fluid outlet and the second fluid outlet (166) are used to provide a fluid into a first reservoir or a second reservoir, respectively (tube shown in Figure 4 that fluid passage 54 feeds into). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping device, as taught by Hooven, to include fluid outlets that are used to provide a fluid into a reservoir, as taught by Mulier et al, in order to a maintain relatively consistent maximal electrical contact areas, substantially prevent hot spots and allow higher power than soft coagulation, and further allows for little to no arcing, cutting smoke or char (Col. 5, lines 53-56).

Referring to claim 74, Hooven fails to teach a fluid outlet. Mulier et al teaches wherein: at least one of the first reservoir and the second reservoir is adjacent the first electrode or the second electrode, respectively (Col. 4, line 65 through Col. 5, line 8; Figure 4). By modifying the Hooven reference to include a reservoir (tube shown in Figure 4 that fluid passage 54 feeds into), it would be adjacent the first or second electrode. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping device, as taught by Hooven, to have at least one of the first reservoir and the second reservoir adjacent the first or second electrode, as taught by Mulier et al, in order to a maintain relatively consistent maximal electrical contact areas, substantially prevent hot spots and allow higher power than soft coagulation, and further allows for little to no arcing, cutting smoke or char (Col. 5, lines 53-56).

Art Unit: 3739

Referring to claim 75, Hooven teaches wherein the first jaw tissue grasping surface has a first edge opposite a second edge (shown best in Figure 5). Mulier et al teaches wherein a portion of one of the reservoir (tube shown in Figure 4 that fluid passage 54 feeds into) is between the electrode and the edge of the jaw tissue grasping surface (Col. 4, line 65 through Col. 5, line 8; Figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping device, as taught by Hooven, to have a portion of the reservoir between the electrode and the edge of the jaw tissue grasping surface, as taught by Mulier et al, in order to ensure that the fluid is position correctly in order to maintain relatively consistent maximal electrical contact areas, substantially prevent hot spots and allow higher power than soft coagulation, and further allows for little to no arcing, cutting smoke or char (Col. 5, lines 53-56).

Referring to claim 76, Hooven teaches wherein the first jaw tissue grasping surface has a first edge opposite a second edge (shown best in Figure 5). The modified Hooven reference teaches wherein the first electrode is spaced along the first edge of the first jaw tissue grasping surface by a first reservoir. Mulier et al teaches placing the fluid reservoir (tube shown in Figure 4 that fluid passage 54 feeds into) in the center of the jaw tissue grasping surface. As such, when modifying the tissue grasping surface, as taught by Hooven, the reservoir, as taught by Mulier, would be located in the approximate center of the tissue grasping surface which would therefore have the first

Art Unit: 3739

electrode (18) be spaced along the first edge of the first jaw tissue grasping surface (33/37/56) by the reservoir.

Referring to claim 77, Hooven teaches wherein the first jaw (22) has a first side portion opposite a second side portion (shown best in Figure 5); the first electrode (42) being on the first side portion of the first jaw (22); the second electrode (44) being on the second side portion of the first jaw (22) (Col. 4, lines 11-56; Figures 4A, 5 and 6). Hooven fails to teach fluid outlets. Mulier et al teaches having a first and second fluid outlet, which teaches having the plurality of outlets (166) in approximately the center of the jaw to provide fluid on the entire jaw surface (Col. 5, lines 1-49; Figures 3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the first jaw having a first and second electrode, as taught by Hooven, to have a first and second fluid outlets on either side of the first jaw to provide fluid, as taught by Mulier et al., in order to allow the conductive solution to be infused onto and into the tissue (Col. 5, lines 53-56).

Referring to claim 78, Hooven fails to teach a fluid delivery passage. Mulier et al teaches wherein the at least one fluid delivery passage comprises a first fluid delivery passage (52) and a second fluid delivery passage (54); the first fluid outlet (166) in fluid communication with the first fluid delivery passage (52); and the second fluid outlet (166) in fluid communication with the second fluid delivery passage (54) (Col. 4, line 55 through Col. 5, lines 37). It would have been obvious to one of ordinary skill in the art at

Art Unit: 3739

the time of the invention to modify the tissue grasping device, as taught by Hooven, to have two separate fluid delivery passages with their own respective fluid outlets, as taught by Mulier et al, in order to provide enough conductive solution to both jaws (Col. 5, lines 38-60).

Referring to claim 79, Hooven fails to teach a fluid delivery passage. Mulier et al teaches wherein the first fluid delivery passage (52) and the second fluid delivery passage (54) are defined by an electrode (Col. 4, lines 55-64; Figures 3-4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the electrodes, as taught by Hooven, to include fluid delivery passages, as taught by Mulier et al., in order to provide the advantages of using a conductive solution (Col. 5, lines 38-60).

Referring to claim 83, Hooven teaches the device of claim 68 wherein: the first jaw (22) comprises a first jaw support structure (50) beneath the first jaw tissue grasping surface (surface of 50), the first jaw support structure (50) having a first side portion opposite a second side portion (shown best in Figure 5); the first electrode (42) being along the first side portion of the first jaw support structure; and the second electrode (44) being along the second side portion of the first jaw support structure (50) (Col. 4, lines 11-26; Figures 3, 4a, and 5).

Art Unit: 3739

Referring to claim 87, Hooven teaches a device of claim 68 further comprising: a cutting mechanism (34) (Col. 3, lines 55-61; Figures 4c and 5).

Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hooven (6,086,586) in view Mulier et al (6,096,037) as applied to claim 68 above, and further in view of Webster (6,217,574).

Referring to claim 80, Hooven fails to expressly teach wherein the electrodes are hollow. The modified Hooven reference teaches a fluid outlet. Webster teaches an analogous tissue treatment device wherein the electrode (30) comprises a hollow structure (Col. 5, lines 36-50; Figures 4 and 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the electrodes, as taught by Hooven, to be hollow, as taught by Webster, in order to provide a central irrigation channel (Col. 5, lines 36-50) for passing fluid for cooling electrodes while they are in use (Col. 2, lines 5-9).

Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hooven (6,086,586) in view Mulier et al (6,096,037) as applied to claim 68 above, and further in view of Eggers et al (5,484,436).

Referring to claim 81, Hooven and Mulier fail to expressly teach that the tissue grasping surface includes a hydrophobic surface. However, Eggers et al teaches an analogous tissue grasping device wherein a hydrophobic surface is used, such as

Art Unit: 3739

Teflon (Col. 6, lines 64-67). Hooven specifically teaches using non-stick material on the tissue grasping surfaces (Col. 4, lines 45-53). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping surface, as taught by Hooven, to be hydrophobic, as taught by Eggers, in order to prevent the ingress of biological fluid or saline solution in the instrument (Col. 6, lines 64-67).

Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hooven (6,086,586) in view Mulier et al (6,096,037) as applied to claim 68 above, and further in view of Rydell (5.462,546).

Referring to claim 82, Hooven fails to expressly teach that the electrodes have one or more serrations. Rydell teaches an analogous tissue grasping tissue (Figure 1) comprising a first (62) and second (60) jaws wherein the jaws have serrations (61) (Col. 4, lines 19-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping surface of the jaws, as taught by Hooven, to have serrations, as taught by Rydell, in order to improve gripping ability (Col. 4, lines 29-31).

Claims 84 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hooven (6,086,586) in view Mulier et al (6,096,037) as applied to claim 68 above, and further in view of Weaver (5,693,052).

Referring to claim 84, Hooven teaches wherein at least one jaw (22) comprises a first jaw support structure (50) beneath the first jaw tissue grasping surface (surface of

Art Unit: 3739

50) however fails to expressly teach a heat sink. Weaver teaches an analogous tissue grasper instrument which uses a nickel-free high chromium coating as a heat sink (Col. 3, lines 1-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the support structure, as taught by Hooven, to have a heat sink coating, as taught by Weaver, in order to minimize heat buildup at the treatment site (Col. 3, lines 18-23).

Referring to claim 85, Hooven and Mulier fails to expressly teach a standoff. Weaver teaches an analogous tissue grasper instrument which uses a nickel-free high chromium coating, which inhibits tissue from physically contacting the electrode. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the electrodes, as taught by Hooven, to have a stand-off coating, as taught by Weaver, in order to minimize heat building up and minimize sticking of debris to the electrodes (Col. 3, lines 18-23).

Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hooven (6,086,586) in view Mulier et al (6,096,037) as applied to claim 68 above, and further in view of Yates et al (5,810,811).

Referring to claim 86, Hooven fails to expressly teach a tissue treatment indicator. Yates teaches an analogous tissue grasping device (Figure 1) comprising: a first jaw (32) and a second jaw (34), at least one of the jaws (32) being movable toward the other jaw (34); the first jaw (32) having a first jaw tissue grasping surface (33/37/56)

Art Unit: 3739

and the second jaw (34) having a second jaw tissue grasping surface (35) (Col. 6, lines 40-58) and further teaches a tissue treatment indicator which provides an output related to the level of treatment of tissue (Col. 9, lines 6-51; Figure 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tissue grasping device, as taught by Hooven, to include a tissue treatment indicator, as taught by Yates et al, in order to measure electrical parameters of the system to include a coagulation level which is useful when the coagulation zone is not visible to the user and may also help to determine tissue characteristics which indicates degree of coagulation (Col. 9, lines 7-15).

Response to Arguments

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMANTHA GOOD whose telephone number is (571)270-7480. The examiner can normally be reached on Monday - Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/517,947 Page 15

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./ Examiner, Art Unit 3739 /Michael Peffley/ Primary Examiner, Art Unit 3739